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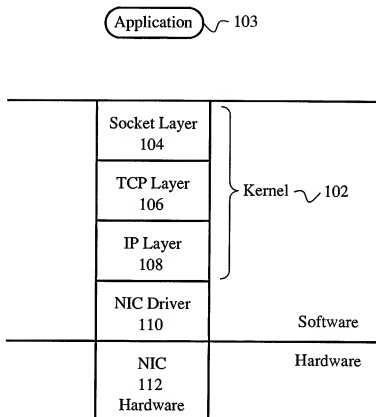


Figure 1

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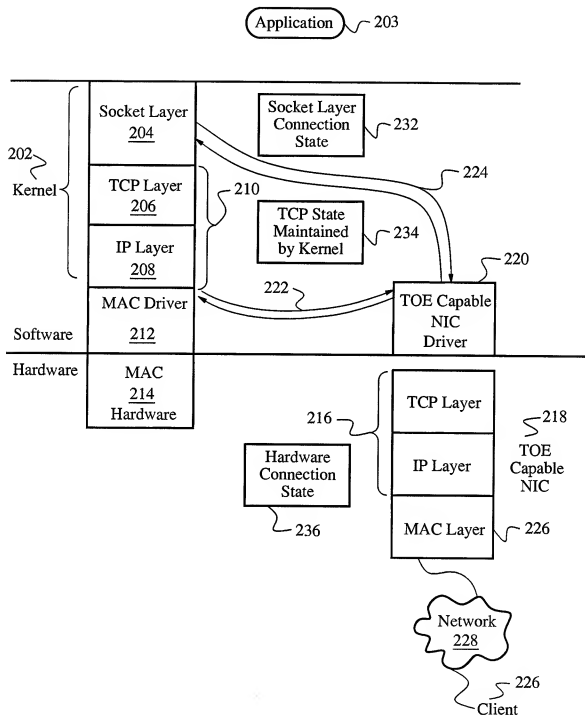


Figure 2

Data Structures

A. Data structures maintained by socket layer:

1. Connection state maintained by socket layer (SONODE): Socket state information.

SOCKET LAYER CONNECTION IDENTIFIER

HARDWARE CONNECTION IDENTIFIER

POINTER TO CONNECTION STATE MAINTAINED BY KERNEL (*
 CONNT)

2. Connection state table maintained by socket layer:

Identifier	State information
A	Pointer to socket layer connection state
.	.
.	.

B. Connection state maintained by kernel (CONNT): TCP/IP state information KERNEL CONNECTION IDENTIFIER

1. Minimum state necessary to offload a connection (MIN_TCP_T):
 Local (server) and remote (client) IP addresses and ports
 Send/receive sequence numbers of packets for the connection
 Any round trip estimates for each packet
 Congestion window, slow start

C. Hardware connection state maintained by NIC (HW_CONN_T): NIC connection state

HARDWARE CONNECTION IDENTIFIER (HW_CONNID)
 POINTER TO SOCKET STATE INFORMATION (*SONODE)

1. Minimum state necessary to offload a connection (MIN_TCP_T):
 Local (server) and remote (client) IP addresses and ports
 Send/receive sequence numbers of packets for the connection
 Any round trip estimates for each packet
 Congestion window, slow start

Figure 3

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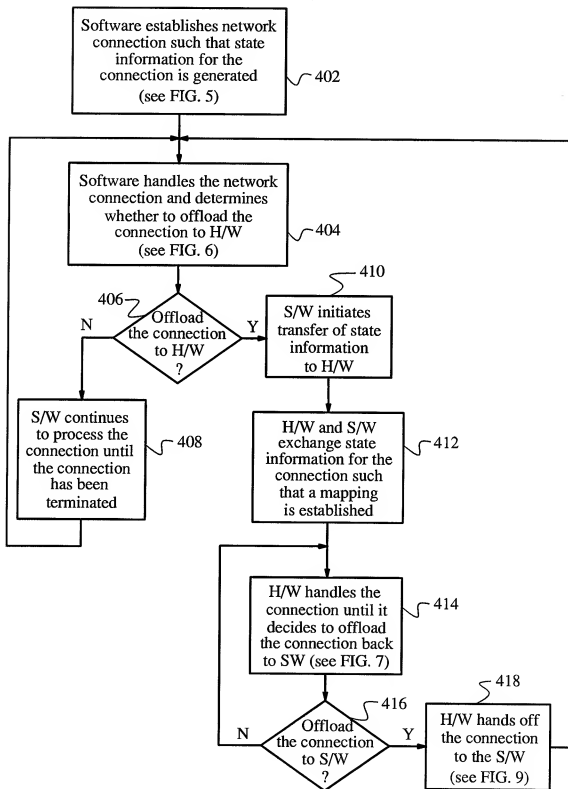


Figure 4

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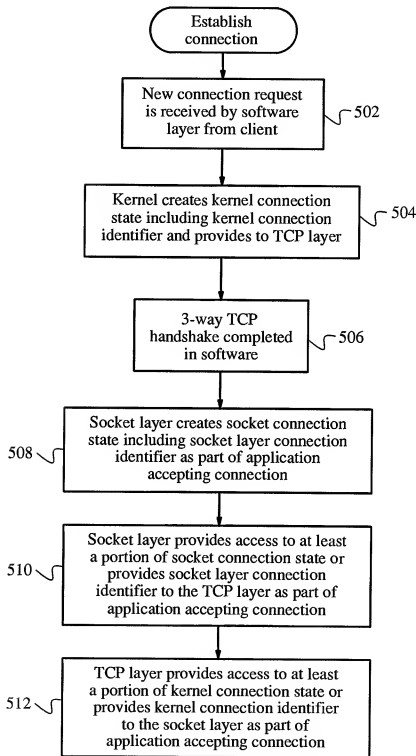


Figure 5

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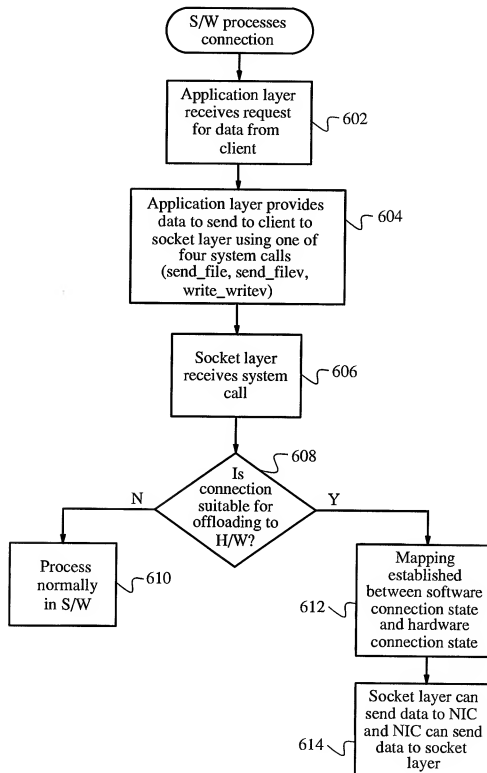


Figure 6

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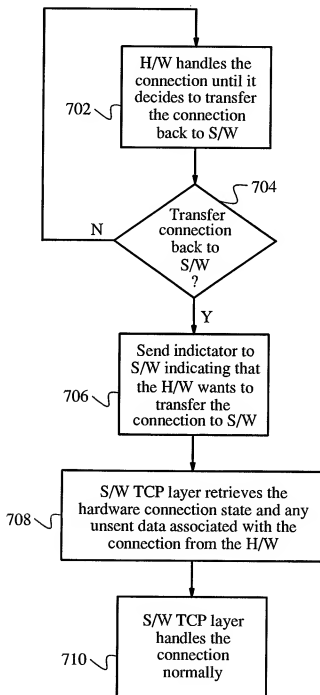


Figure 7

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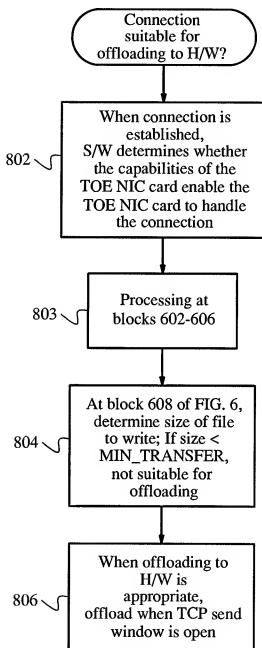


Figure 8

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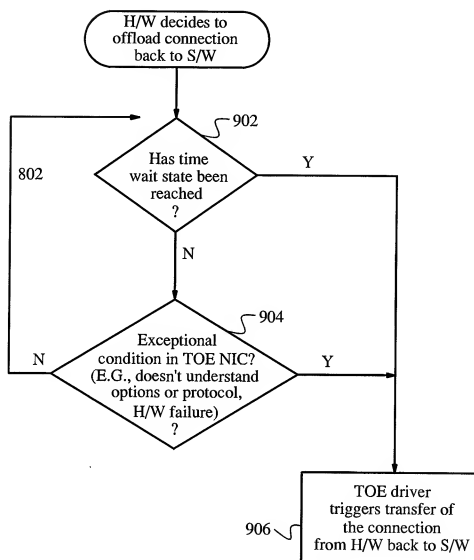


Figure 9

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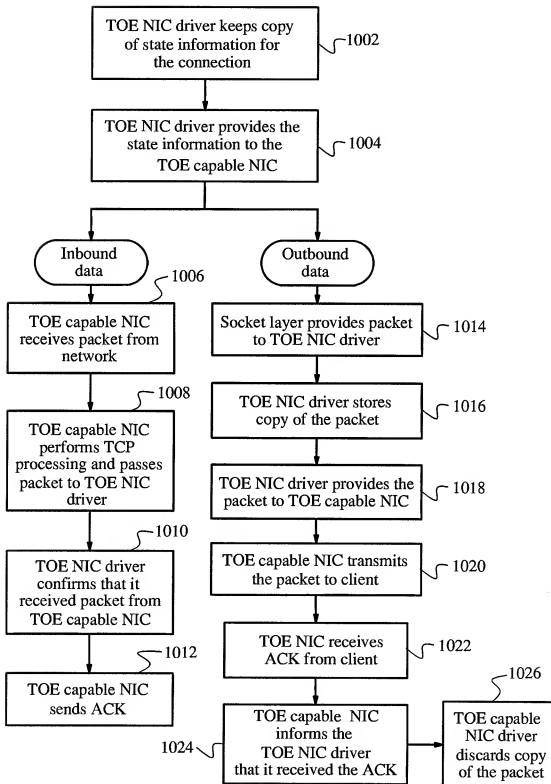


Figure 10

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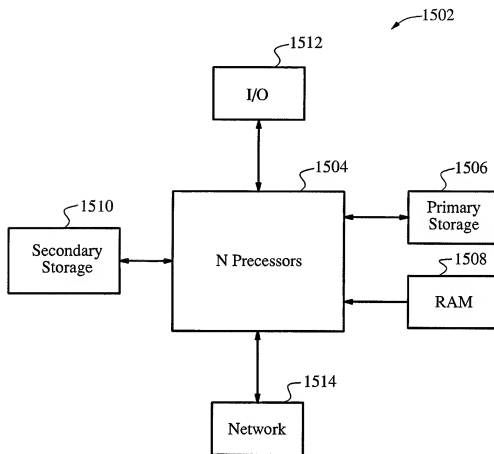


Figure 11